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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/657,237

09/09/2003

James Thomas Edward McDonnell

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

NGUYEN, KHAI MINH

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

01/30/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/657,237	<b>Applicant(s)</b> MCDONNELL ET AL.	
	<b>Examiner</b> KHAI M. NGUYEN	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/18/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9-11, 14, 18-19, and 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459), in view of Kimura, Shinya (EP 1161031A2), and further in view of Gerdes et al. (U.S.Pub-20030046541).

Regarding claim 1, Haartsen teaches a method wherein a cellular communications service provider authenticates a provider of a service running at a wireless base station, the method comprising:

verifying the trustworthiness of the provider (fig.1-2, item 102) of the service with a party independent (col.5, lines 17-22) from said provider responsive to a request for verification from a communications device of the user (col.3, lines 24-36); and

Haartsen fails to specifically disclose receiving an indication of potential use of a specified wireless hotspot from a user.

However, Kimura teaches receiving an indication of potential use of a specified wireless hotspot (access point 18) from a user ([0017] lines 9-13).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Haartsen and Kimura fail to specifically disclose on successful verification of the provider of the service, providing the user with a confirmation that the provider of the service is authenticated by the cellular communications service provider.

However, Gerdes teaches on successful verification of the provider of the service ([0012]), providing the user with a confirmation that the provider of the service is authenticated by the cellular communications service provider ([0012] and [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Gerdes to Haartsen and Kimura to provide the combination and concatenation of security features makes the method more secure, because it is more difficult to interfere.

Regarding claim 2, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1, wherein the service is use of the hotspot (see Kimura, access point 18) and the provider of the service is a wireless hotspot provider (see Kimura, [0038], see Gerdes, abstract).

Regarding claim 3, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1, wherein the service is a service running over infrastructure of the wireless hotspot (see Kimura, access point 18) and the provider of the service is not the provider of the wireless hotspot (see Gerdes, [0035]).

Regarding claim 4, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1, wherein the confirmation provided comprises a key enabling the user to use the service provided by the provider (see Gerdes, [0003]).

Regarding claim 9, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1, wherein the indication of potential use is a positive request from the user (see Kimura, [0043]).

Regarding claim 10, Haartsen teaches a computer system for a cellular telecommunications provider, comprising a processor arranged for:

authenticating providers of the services available at the specified wireless hotspot (item 110, col.3, lines 6-8) response to a request for authentication of service providers from a communication device of the user (col.3, lines 24-36); and

Haartsen fails to specifically disclose receiving an indication of potential use of a specified wireless hotspot from a user; and identifying services available at the specified wireless hotspot.

However, Kimura teaches receiving an indication of potential use of a specified wireless hotspot from a user ([0017] lines 9-13); and identifying services available at the specified wireless hotspot ([0017] and [0032]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Haartsen and Kimura fail to specifically disclose preparing authentication information for use by the user.

However, Gerdes teaches preparing authentication information for use by the user ([0012] and [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Gerdes to Haartsen and Kimura to provide the combination and concatenation of security features makes the method more secure, because it is more difficult to interfere.

Regarding claim 11, Haartsen, Kimura, and Gerdes further teach a computer system as claimed in claim 10, wherein in preparing the authentication information the processor is arranged for generating a cryptographic key (see Gerdes, [0015]).

Regarding claim 18, Haartsen, Kimura, and Gerdes further teach a computer system as claimed in claim 10, wherein in authenticating providers of the services the

processor is arranged for verifying the trustworthiness of the providers of the services (see Kimura, [0017] and [0038]).

Regarding claim 14, Haartsen teaches a storage medium storing a computer-readable program code thereon, the computer-readable program code being arranged to cause a computer system of a cellular communications provider to:

authenticate providers of the services available at the specified wireless hotspot (item 110, col.3, lines 6-8) response to a request for authentication of service providers from a communication device of the user (col.3, lines 24-36); and

Haartsen fails to specifically disclose receive an indication of potential use of a specified wireless hotspot from a user; and identify services available at the specified wireless hotspot.

However, Kimura teaches receive an indication of potential use of a specified wireless hotspot from a user ([0017] lines 9-13); and identify services available at the specified wireless hotspot ([0017] and [0032]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Haartsen and Kimura fail to specifically disclose prepare authentication information for use by the user.

However, Gerdes teaches prepare authentication information for use by the user ([0012] and [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Gerdes to Haartsen and Kimura to provide the combination and concatenation of security features makes the method more secure, because it is more difficult to interfere.

Regarding claim 19, Haartsen, Kimura, and Gerdes further teach a storage medium as claimed in claim 14, wherein the computer-readable program code arranged to cause the computer system of the cellular communication provider to authenticate providers of the services is arranged for verifying the trustworthiness of the providers of the services (see Kimura, [0017] and [0038]).

Regarding claim 22, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1, wherein the provision of the confirmation that the provider of the service is authenticated is provided via a cellular communication link between the cellular communications service provider and the user (see Gerdes, [0012] and [0035]).

Regarding claim 24, Haartsen, Kimura, and Gerdes further teach a computer system as claimed in claim 10, wherein the computer system is further arranged to provide the confirmation via a cellular communication link between the cellular communications service provider and the user (see Gerdes, [0012] and [0035]).



4. Claims 15-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459), in view of Kimura, Shinya (EP 1161031A2), and further in view of Stewart et al. (U.S.Pub-20060183467).

Regarding claim 15, Haartsen teaches a method wherein a cellular telecommunications provider authorises a user to use a location-dependent service, the method comprising:

authenticating a provider of the service responsive to a request for authentication of the service provider (item 110, col.3, lines 6-8) from a communication device of the user (col.3, lines 24-36); and

Haartsen fails to specifically disclose authenticating the provider of the service to the user.

However, Kimura teaches authenticating the provider of the service to the user ([0017] and [0032]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Haartsen and Kimura fails to specifically disclose tracking the location of the user via a wireless communications device of the user; and determining that the user is or will be within an operating range of location-dependent service.

However, Stewart teaches tracking the location of the user via a wireless communications device of the user ([0015]); and determining that the user is or will be within an operating range of location-dependent service ([0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen and Kimura to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 16, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 15, further comprising receiving a request to use the location-dependent service by the user (see Kimura, [0017] and [0032]).

Regarding claim 17, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 16, wherein authenticating the provider of the service commences prior to receiving the request authenticating the provider of the service subsequent to receiving the request (see Kimura, [0038]).

Regarding claim 20, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 15, wherein authenticating the provider of the service comprises verifying the trustworthiness of the providers of the services (see Kimura, [0017] and [0032]).

5. Claims 5-8, 12-13, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459), in view of Kimura, Shinya (EP

1161031A2) in view of Gerdes et al. (U.S.Pub-20030046541) and further in view of Stewart et al. (U.S.Pub-20060183467).

Regarding claim 5, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1,

Kimura and Gerdes fail to specifically disclose tracking the location of a user via a user's wireless communications device; and predicting, from the location of the user a service at a wireless hotspot within current or future range of the user.

However, Stewart teaches tracking the location of a user via a user's wireless communications device ([0015]); and predicting, from the location of the user a service at a wireless hotspot within current ([0015]) or future range of the user.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen, Kimura, and Gerdes to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 6, Haartsen, Kimura, Gerdes, and Stewart further teach a method as claimed in claim 5, further including supplying the user with information concerning the location of one or more hotspots close to the user or closest to the user (see Stewart, [0014]-[0015], [0023]).

Regarding claim 7, Haartsen, Kimura, Gerdes, and Stewart further teach a method as claimed in claim 5, wherein the indication of potential use is determination

that the hotspot is within present or future range of the user (see Stewart, [0014]-[0015]).

Regarding claim 8, Haartsen, Kimura, Gerdes, and Stewart further teach a method as claimed in claim 7, further including receiving a positive request to use the service (see Kimura, [0035]), and commencing authentication of the provider of the service before the positive request is received (see Gerdes, abstract).

Regarding claim 12, Haartsen, Kimura, and Gerdes further teach a computer system as claimed in claim 10,

Haartsen, Kimura, and Gerdes fail to specifically disclose the processor is further arranged for receiving location information representing the location of the user, and for determining from the location information one or more wireless hotspots that are or will be within the range of the user.

However, Stewart teaches the processor is further arranged for receiving location information representing the location of the user ([0015]), and for determining from the location information one or more wireless hotspots that are or will be within the range of the user ([0014]-[0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen, Kimura, and Gerdes to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 13, Haartsen, Kimura, Gerdes, and Stewart further teach a computer system as claimed in claim 12, wherein the processor is further arranged for (a) receiving a positive request for use of a service at the hotspot from the user (see Kimura, [0017]), (b) commencing authenticating a provider of the service before the positive request is received (see Gerdes, [0035]) and (c) preparing authentication information for use by the user after the positive request is received (see Gerdes, abstract, [0035]).

Regarding claim 21, Haartsen, Kimura, and Gerdes further teach a method as claimed in claim 1,

Kimura and Gerdes fail to specifically disclose the indication of potential use is received via a call from a user via the cellular communications service provider.

However, Stewart teaches the indication of potential use is received via a call from a user via the cellular communications service provider ([0022]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen, Kimura, and Gerdes to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 23 is rejected with the same reasons set forth in claim 21.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **KHAI M. NGUYEN** whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617

/Khai M Nguyen/  
Examiner, Art Unit 2617

1/21/2009